

Wood Cutting Tools
Bits, Cutters,
Machinery



Manufactured By
MORRIS WOOD & SONS

5108-5110 West Lake Street
CHICAGO, ILL.
U.S.A.

CATALOG NUMBER FIFTY - FOUR

ESTABLISHED 1874

MORRIS WOOD & SONS

MANUFACTURERS OF
IMPROVED AND PATENTED

**Wood Boring Bits,
Counter-Sinks, Drills,
Cutters and Tools of
every Description.**

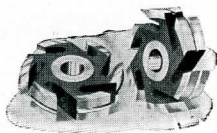


GENERAL OFFICES AND WORKS

5108-5110 WEST LAKE STREET
CHICAGO, ILL.

CABLE ADDRESS - WOODRILL, CHICAGO

LONG DISTANCE PHONE - 0190 AUSTIN



It Pays to Use the Genuine



THE following illustrations are from photographs of tools which we manufacture in a factory devoted exclusively to the production of the most improved design and highest possible quality of material and workmanship.

Our tools are the fastest and cleanest cutting, and our special process of tempering insures you the toughest and longest lasting tool possible.

All standard tools are in stock and are shipped the day order is received.

Any form of special tool is furnished promptly.

Our tools are often imitated in appearance but not in lasting qualities.

Test our tools. Then use the proven best.

*Fifty-three years of continued success
stands for quality.*

Style 5 Countersink



The original Morris Wood & Sons' Countersinks with loose drills.

Center drills adjusted as desired. When set screw in boring machine spindle is tightened on split shank, center drill is held firmly in place.

Stock lengths. Countersink, including shank $4\frac{1}{2}$ inches. Shanks $\frac{1}{2}$ inch diameter $\times$ $1\frac{1}{2}$ inches long. Center drills 6 inches long. Also carried in stock with Morse No. 1 taper shank. Special lengths and sizes to order promptly.

Price of Countersinks Carried in Stock

Diameter		Price Including Drills, Each	
$\frac{3}{8}$ -inch	.....	} With $\frac{5}{32}$ or $\frac{1}{8}$ Drills	\$3.00
$\frac{7}{16}$	"		
$\frac{1}{2}$	"	" $\frac{3}{8}, \frac{7}{32}$ or $\frac{1}{4}$ Drills	3.00
$\frac{9}{16}$	"	" $\frac{1}{2}, \frac{5}{16}, \frac{1}{4}$ or $\frac{3}{8}$ Drills	3.00
$\frac{5}{8}$	"	" $\frac{3}{4}, \frac{5}{8}, \frac{1}{4}, \frac{3}{8}$ or $\frac{1}{8}$ Drills	3.50
$\frac{11}{16}$	"	" $\frac{3}{2}, \frac{1}{4}, \frac{3}{8}$ or $\frac{1}{8}$ Drills	3.70
$\frac{3}{4}$	"	" $\frac{1}{4}, \frac{3}{8}, \frac{1}{8}$ or $\frac{1}{16}$ Drills	4.20
$\frac{13}{16}$	"	" $\frac{3}{2}, \frac{1}{8},$ or $\frac{1}{16}$ Drills	4.50
$\frac{7}{8}$	"	" $\frac{1}{8}, \frac{1}{16},$ or $\frac{3}{8}$ Drills	4.80
1	"	" $\frac{1}{8}, \frac{1}{16}, \frac{3}{8}$ or $\frac{1}{16}$ Drills	5.30
$1\frac{1}{8}$	"	" $\frac{1}{8}, \frac{1}{16}, \frac{3}{8}$ or $\frac{1}{16}$ Drills	6.00
$1\frac{1}{4}$	"	" $\frac{1}{8}, \frac{1}{16}, \frac{3}{8}$ or $\frac{1}{16}$ Drills	7.00
$1\frac{3}{8}$	"	" $\frac{1}{8}, \frac{1}{16}, \frac{3}{8}, \frac{1}{16}$ or $\frac{1}{2}$ Drills	8.00
$1\frac{1}{2}$	"	" $\frac{1}{16}, \frac{3}{8}, \frac{1}{16}, \frac{1}{2}$ or $\frac{1}{8}$ Drills	9.50

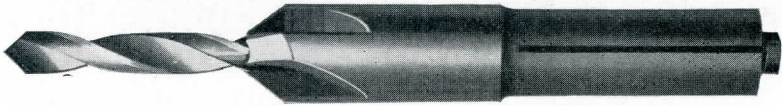
Style 5 Countersink Drills

Also in stock in lengths of 7 in., 8 in. and 9 in.



Diameter		List Price, Each	
$\frac{3}{32}, \frac{1}{8}$ or $\frac{5}{32}$	6 inches		\$0.50
$\frac{3}{16}, \frac{1}{4}, \frac{5}{16}, \frac{3}{8}$ or $\frac{1}{4}$	6 "		.50
$\frac{17}{64}$ or $\frac{3}{16}$	6 "		.60
$\frac{5}{16}$	6 "		.70
$\frac{11}{16}$	6 "		.80
$\frac{3}{8}$	6 "		.90

Style 8 Taper Countersink



This Countersink is made to bore for the screw and countersink for screw head in one operation. It has the same advantages as our style 5 described on page 4.

Stock lengths. Countersink 3 inches long including shank. Center drills $4\frac{1}{2}$ inches total length. Shank $\frac{1}{2}$ inch diameter x $1\frac{1}{2}$ inch long. Also in stock with Morse No. 1 Taper Shank. Special lengths or sizes to order promptly.

Diameter	Price Including Center Drill, Each
$\frac{1}{2}$ inch With $\frac{3}{32}$, $\frac{1}{8}$, $\frac{5}{32}$ or $\frac{1}{4}$ Drills.....	\$3.00
$\frac{1}{8}$ " " $\frac{1}{32}$, $\frac{3}{32}$, $\frac{1}{16}$, $\frac{1}{4}$ or $\frac{1}{2}$ Drills.....	3.00
$\frac{5}{8}$ " " $\frac{3}{32}$, $\frac{1}{16}$, $\frac{1}{8}$, $\frac{1}{4}$ or $\frac{3}{8}$ Drills.....	3.30

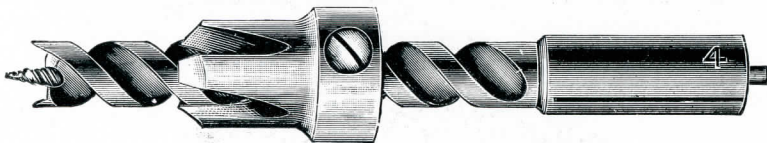
Style 8 Countersink Drills

Made especially for Style 8 Taper Counter Sink.



Diameter	Each
$\frac{3}{32}$ or $\frac{1}{8}$ $4\frac{1}{2}$ inches	\$0.30
$\frac{5}{32}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ or $\frac{1}{2}$ $4\frac{1}{2}$ "	.30
$\frac{3}{8}$ $4\frac{1}{2}$ "	.40
$\frac{1}{2}$ $4\frac{1}{2}$ "	.50
$\frac{5}{8}$ $4\frac{1}{2}$ "	.60
$\frac{3}{4}$ $4\frac{1}{2}$ "	.70

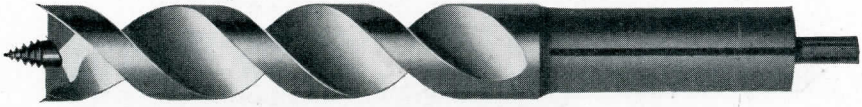
Style 4 Taper Shell Countersink



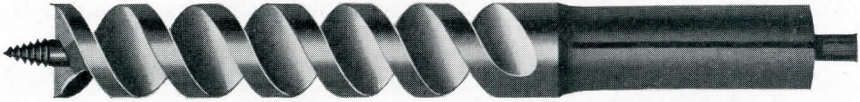
Diameter	Each	Diameter	Each
$\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ in.....	\$1.50	$\frac{5}{8}$ in.	\$2.75
$\frac{1}{2}$, $\frac{3}{4}$ in.	2.00	$\frac{3}{4}$ in.	3.00
		1 in.	4.00

Also furnished with straight lips like style 5. Any kind of countersink adjustable or solid furnished promptly on receipt of drawing.

Style 7 Side Boring Bit



Style 3 End Boring Bit



Guaranteed to outlast from 12 to 25 of the common solid center bits, as these bits are sharpened and worn clear to the shank. Split shank holds screw point firmly in place. Extra points, 5c each.

Standard length 3 inch twist. Shank $1\frac{1}{2}$ inches long $\times$ $\frac{1}{2}$ inch diameter. Total length $4\frac{1}{2}$ inches. Special lengths furnished promptly to order. Also furnished with Morse No. 1 Taper Shank.

Two screw shank chucks to fit any boring machine will be furnished free to customers ordering 1 dozen or more of these bits.

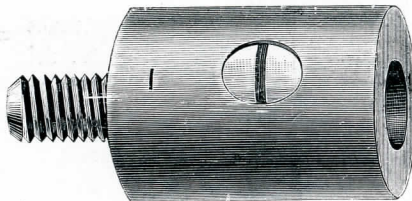
See cut No. 1, below.

Price of Boring Bits Carried in Stock

Other Sizes made to order upon application.

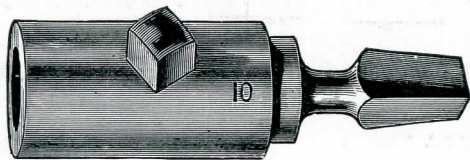
Diameter, $\frac{5}{16}$ inch..	Price each, \$2.50	Diameter, $\frac{13}{16}$ inch..	Price each, \$4.20
" $\frac{3}{8}$ " .. " "	2.50	" $\frac{7}{8}$ " .. " "	4.50
" $\frac{7}{16}$ " .. " "	2.50	" $\frac{15}{16}$ " .. " "	4.70
" $\frac{1}{2}$ " .. " "	2.50	" 1 " .. " "	5.00
" $\frac{9}{16}$ " .. " "	3.00	" $1\frac{1}{8}$ " .. " "	5.50
" $\frac{5}{8}$ " .. " "	3.50	" $1\frac{1}{4}$ " .. " "	6.00
" $\frac{11}{16}$ " .. " "	3.70	" $1\frac{3}{8}$ " .. " "	7.00
" $\frac{3}{4}$ " .. " "	4.00	" $1\frac{1}{2}$ " .. " "	8.00

No. 1 Chuck for Prybil Boring Machine



This Chuck has a $\frac{1}{2}$ -inch hole which enables anyone to use bits with a $\frac{1}{2}$ -inch shank in the Prybil, American and other boring machines.
Price, each\$1.00

No. 10 Chuck for Bit Stock



Machine Bits with 1/2" round shank can be used in a hand brace.
Price, each\$1.25

Style 514 Screw Shank Countersink



This Countersink is made to fit any make of boring machine. Is similar to Style 5, page 4, except center drill is held in place by set screw.

Price of Countersinks Carried in Stock

Other Sizes made to order upon application.

Diameter		List Price, Each	
3/8 inch	} With 3/32 or 1/16 Drills.....	\$3.50	
1/2 "		3.50	
5/8 "		4.00	
1 1/8 "		4.20	
1 1/4 "		4.70	
1 3/8 "		5.00	
1 1/2 "		5.30	
1 3/4 "		5.80	

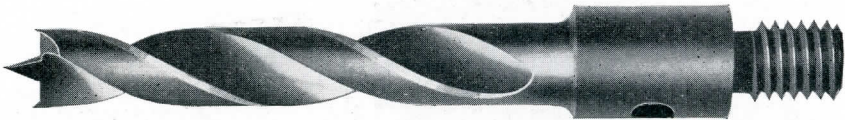
Style No. 23 Screw Shank Drill Bit

For Jenkin's Chair Seat Boring Machine



Diameter		Length		List Price Per Doz.
1/4 inch	.....	4 1/2 inches	.....	\$12.00
5/16 "	.....	4 1/2 "	.....	13.20
3/8 "	.....	4 1/2 "	.....	14.40
7/16 "	.....	4 1/2 "	.....	15.60
1/2 "	.....	4 1/2 "	.....	18.00
5/8 "	.....	4 1/2 "	.....	20.40
3/4 "	.....	4 1/2 "	.....	24.00

Style 14 Screw Shank Brad Point Drills

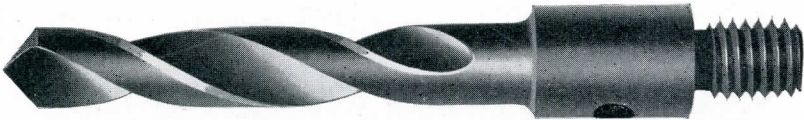


Carried in stock to fit every make of machine on the market, including Nash, Clement, Pryibil, American, Valley City and our Standard No. 1 right or left hand. Send sample shank with first order.

Sizes carried in stock. Special lengths on application.

Diameter		Length	List Price Each
1/4	.....	4 1/2	\$1.30
5/16	.....	4 1/2	1.30
3/8	.....	4 1/2	1.40
7/16	.....	4 1/2	1.50
1/2	.....	4 1/2	1.70
9/16	.....	4 1/2	1.90
5/8	.....	4 1/2	2.20
11/16	.....	4 1/2	2.50
3/4	.....	4 1/2	2.80
13/16	.....	4 1/2	3.20
7/8	.....	4 1/2	3.50
15/16	.....	4 1/2	3.80
1	.....	4 1/2	4.30

Style 12 Screw Shank Drill Point Drills



Carried in stock to fit every make of machine on the market including Nash, Clement, American, Pryibil, Valley City and our Standard No. 1. Send sample shank with first order. Right or left hand.

Diameter		Length	Price Each
1/4 inch	.....	4 1/2 inches	\$1.00
5/16 "	.....	4 1/2 "	1.10
3/8 "	.....	4 1/4 "	1.20
7/16 "	.....	4 1/2 "	1.30
1/2 "	.....	4 1/2 "	1.50
9/16 "	.....	4 1/2 "	1.70
5/8 "	.....	4 1/2 "	2.00

Style No. 16 Screw Shank Dowell Bits

Will fit Prybil, Clement or our Standard No. 1 Machine

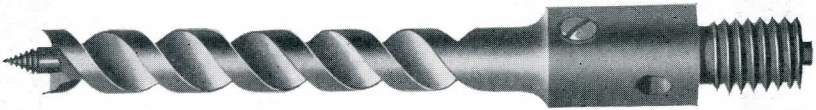


Sizes carried in stock.

Sizes in 16ths—Price per Dozen—

4	5	6	7	8	9	10	11	12	13	14	15	16
\$7.20	\$7.20	\$7.20	\$7.20	\$7.20	\$7.60	\$8.00	\$8.50	\$9.00	\$9.60	\$10.20	\$10.80	\$11.40

Style 714 Screw Shank Boring Bit



Screw Point adjustable and replaced at 5c if broken. This bit may be sharpened and worn clear to the shank. Will outlast a dozen of style 16.

Sizes carried in stock.

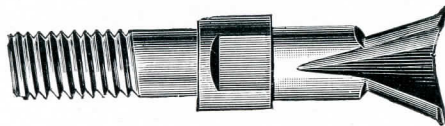
Sizes in 16ths—Price each—

5	6	7	8	9	10	11	12	13	14	15	16
\$2.50	\$2.50	\$2.50	\$2.50	\$3.00	\$3.50	\$3.70	\$4.00	\$4.20	\$4.50	\$4.70	\$5.00

Style 30 Screw Shank Dovetail Cutters

5/16—18 or 3/8—20 for Dodd's Machine

Also carried with one-half inch Straight Shank



1/4, 5/16, 3/8 or 1/2 in. Price per dozen.....\$12.00

Any size or style dovetail cutters to order promptly.

Style 20 Brad Point DrillStraight Shanks $\frac{1}{2}$ " diameter by 2" long.

Other size shanks to order. See note at bottom of page.

STYLE 20

**Style 18 Taper Shank Brad Point Drill**

Morse Taper Shanks.

Other Taper Shanks to Order.

STYLE 18

**Price List for either Style 20 or 18 or 20A**

Special Lengths to Order.

See Note below.

Diameter	Price Each	Length Over All
$\frac{1}{8}$ in.	\$0.50	$4\frac{5}{8}$ in.
$\frac{3}{32}$	.55	$4\frac{7}{8}$
$\frac{1}{16}$	.60	5
$\frac{3}{32}$	.65	$5\frac{1}{4}$
$\frac{1}{4}$	.70	$6\frac{1}{8}$
$\frac{3}{32}$	.75	$6\frac{1}{4}$
$\frac{1}{8}$	.80	$6\frac{3}{8}$
$\frac{3}{16}$	.85	$7\frac{1}{2}$
$\frac{3}{8}$	.90	7
$\frac{13}{32}$	.95	$7\frac{1}{4}$
$\frac{7}{16}$	1.00	$7\frac{1}{2}$
$\frac{15}{32}$	1.10	$7\frac{3}{4}$
$\frac{1}{2}$	1.20	8
$\frac{11}{16}$	1.30	8
$\frac{1}{2}$	1.40	8
$\frac{13}{16}$	1.50	8
$\frac{3}{4}$	1.60	8
$\frac{25}{32}$	1.70	8
$\frac{11}{16}$	1.80	8
$\frac{33}{64}$	1.90	8
$\frac{3}{4}$	2.00	8
$\frac{27}{32}$	2.30	8
$\frac{13}{16}$	2.30	8
$\frac{27}{32}$	2.60	8
$\frac{7}{8}$	2.60	8
$\frac{27}{32}$	3.00	8
$\frac{15}{16}$	3.00	8
$\frac{31}{32}$	3.40	8
1	3.50	8
$1\frac{1}{16}$	4.00	8
$1\frac{1}{8}$	4.50	8
$1\frac{3}{16}$	5.00	8
$1\frac{1}{4}$	5.50	8

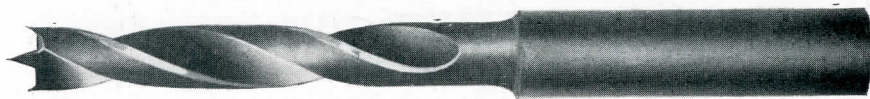
We also carry Style 20A in stock with shanks $\frac{5}{8}$ "x4" twist 4" long to fit Nash 4 Bit Machine.

Order STYLE 20A.

Always order by style number.

Style 19 Brad Point Drills

Shanks one-half inch diameter and two inches long, twist 3 inches long.

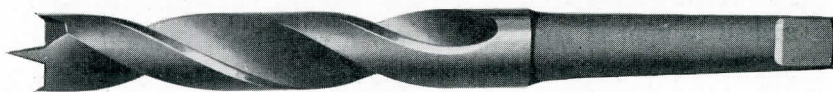


Total length 5 inches including shanks

Diameter Inches	Price Each	Diameter Inches	Price Each	Diameter Inches	Price Each	Diameter Inches	Price Each
$\frac{1}{8}$	\$0.50	$\frac{11}{32}$	\$0.75	$\frac{13}{32}$	\$1.25	$\frac{37}{64}$	\$1.80
$\frac{3}{32}$	.55	$\frac{3}{8}$	.80	$\frac{5}{8}$	1.30	$\frac{7}{8}$	1.90
$\frac{3}{16}$	.60	$\frac{13}{32}$	.85	$\frac{21}{32}$	1.35	$\frac{23}{32}$	2.00
$\frac{7}{32}$	.65	$\frac{7}{16}$	.90	$\frac{11}{16}$	1.40	$\frac{13}{16}$	2.10
$\frac{1}{4}$	.65	$\frac{15}{32}$	.95	$\frac{3}{8}$	1.45	$\frac{31}{32}$	2.20
$\frac{9}{32}$	.70	$\frac{1}{2}$	1.00	$\frac{3}{4}$	1.50	1	2.30
$\frac{5}{16}$	.70	$\frac{17}{32}$	1.10	$\frac{33}{64}$	1.55		
		$\frac{9}{16}$	1.20	$\frac{13}{16}$	1.70		

Style 11 Taper Shank Brad Point Drills

Also furnished with Drill Point. $4\frac{3}{4}$ inches total length. Carried in stock with taper shanks fitting McKnight Boring Machine, right or left hand. Send old taper shank when ordering. Any size taper shank furnished.



Prices same as style 19 Brad Point Drill above.

Style 25 Tuning Pin Drills



These drills are used by piano manufacturers for boring wrest plank to receive tuning pins or other very difficult work.

Size	Price per dozen	Length
$\frac{1}{4}$	\$7.80	4 inches
261/1000	8.50	4 "
$\frac{17}{64}$ and 272/1000	8.50	4 "

Other sizes or lengths furnished promptly.

Style 13 Straight Shank Brad Point Drills



Diameter Inches	Price Each	Length in Inches	Diameter Inches	Price Each	Length in Inches
$\frac{1}{8}$	\$0.40	3	$\frac{3}{32}$	\$0.75	$4\frac{3}{4}$
$\frac{3}{32}$	.45	$3\frac{1}{4}$	$\frac{3}{16}$	.80	5
$\frac{1}{16}$	.50	$3\frac{1}{2}$	$\frac{1}{4}$	.85	$5\frac{1}{4}$
$\frac{7}{32}$	.55	$3\frac{3}{4}$	$\frac{5}{16}$	.90	$5\frac{1}{2}$
$\frac{1}{4}$	.60	4	$\frac{3}{8}$	1.00	$5\frac{3}{4}$
$\frac{9}{32}$	.65	$4\frac{1}{4}$	$\frac{1}{2}$	1.10	6
$\frac{5}{16}$	.70	$4\frac{1}{2}$			

Style 29B Single Flute Drills



For prices see style 29 List on opposite page 13. Also furnished in special lengths and any style shank. This drill is intended for difficult end boring and is only one of the many special kinds of drills which we have designed. Notice how drill is ground for clearance.

Special Drills and Tools

Many years of experience enables our engineering department to design special tools for any purpose. Perhaps you have difficulty boring on an angle, or need to bore and ream a taper hole in one operation, or any one of a hundred unusual and difficult jobs.

WE CAN HELP YOU

Style 29 Straight Shank Drills for Wood

Tempered for Drilling Metal on Request.



Diameter	Price per Dozen	Price Each	Length Over All
$\frac{1}{16}$ in.	\$1.60	\$0.15	$2\frac{1}{2}$ in.
$\frac{5}{64}$	1.65	.15	$2\frac{5}{8}$
$\frac{3}{32}$	1.70	.15	$2\frac{3}{4}$
$\frac{7}{64}$	1.75	.15	$2\frac{7}{8}$
$\frac{1}{8}$	1.80	.15	3
$\frac{9}{64}$	1.85	.20	$3\frac{1}{8}$
$\frac{5}{32}$	1.90	.20	$3\frac{1}{4}$
$\frac{11}{64}$	2.00	.20	$3\frac{3}{8}$
$\frac{3}{16}$	2.25	.25	$3\frac{1}{2}$
$\frac{13}{64}$	2.50	.25	$3\frac{5}{8}$
$\frac{7}{32}$	2.75	.25	$3\frac{3}{4}$
$\frac{15}{64}$	3.00	.30	$3\frac{7}{8}$
$\frac{1}{4}$	3.25	.30	4
$\frac{17}{64}$	3.50	.35	$4\frac{1}{8}$
$\frac{9}{32}$	3.80	.35	$4\frac{1}{4}$
$\frac{19}{64}$	4.00	.40	$4\frac{3}{8}$
$\frac{5}{16}$	4.35	.40	$4\frac{1}{2}$
$\frac{21}{64}$	4.70	.45	$4\frac{5}{8}$
$\frac{11}{32}$	5.05	.45	$4\frac{3}{4}$
$\frac{23}{64}$	5.50	.50	$4\frac{7}{8}$
$\frac{3}{8}$	6.00	.55	5
$\frac{25}{64}$	6.50	.55	$5\frac{1}{8}$
$\frac{13}{32}$	7.00	.60	$5\frac{1}{4}$
$\frac{27}{64}$	7.75	.65	$5\frac{3}{8}$
$\frac{7}{16}$	8.50	.75	$5\frac{1}{2}$
$\frac{29}{64}$	9.25	.80	$5\frac{5}{8}$
$\frac{15}{32}$	10.00	.85	$5\frac{3}{4}$
$\frac{31}{64}$	11.00	1.00	$5\frac{7}{8}$
$\frac{1}{2}$	12.00	1.00	6

Write for Discounts

Style 32 Drill Point Drills for Wood

Tempered for Drilling Metal on Request.



Shanks 1/2 inch diameter and 2 1/4 inches long. Total length 6 inches.

Diameter Inches	Price Each	Diameter Inches	Price Each	Diameter Inches	Price Each
1/8	\$0.50	1/16	\$1.20	1	\$2.50
5/32	.55	3/32	1.25	1 1/32	2.60
3/16	.60	5/8	1.30	1 1/16	2.70
7/32	.65	3/16	1.40	1 3/32	2.80
1/4	.70	1/4	1.50	1 1/8	2.90
9/32	.75	3/8	1.60	1 3/16	3.00
5/16	.80	3/4	1.70	1 7/16	3.10
11/32	.85	3/2	1.80	1 7/32	3.20
3/8	.90	1 1/8	1.90	1 1/4	3.30
13/32	.95	3 1/2	2.00	1 5/16	3.60
7/16	1.00	7/8	2.10	1 3/8	3.90
15/32	1.05	3 3/4	2.20	1 7/16	4.20
1/2	1.10	1 5/8	2.30	1 1/2	4.50
17/32	1.15	3 1/2	2.40		

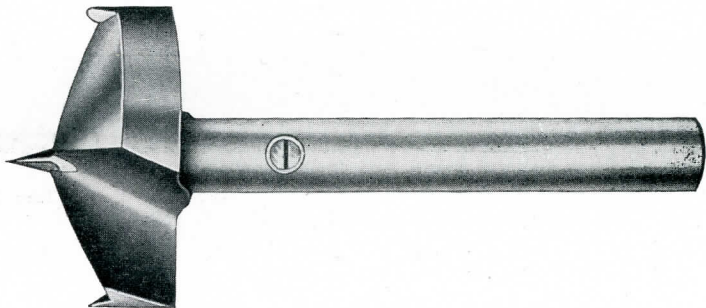
Style 34 Escutcheon or Key Hole Bit



Made with straight or taper Shanks. Send sample or drawing with order.

Price, each\$2.00

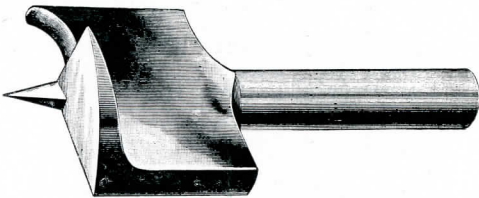
Style 50 Brad Point Boring Bit



Where it is desired to bore a smooth hole through several pieces of stock at once, this bit will be found to do the work properly. Point is removable and can be easily replaced when broken. Lips are also adjustable on all sizes larger than 2 inches diameter. Standard length 5 inches over all. Shanks 1/2x4 inches long.

Size	Price	Size	Price	Size	Price
5/8	\$2.90	1 1/4	\$4.90	2 3/8	\$ 9.00
3/4	3.30	1 1/2	5.30	2 1/2	10.00
7/8	3.70	1 3/4	6.00	2 5/8	10.90
1	4.10	2	7.20	2 3/4	12.00
1 1/8	4.50	2 1/4	8.40	3	14.00

Style 22 Machine Center Bit



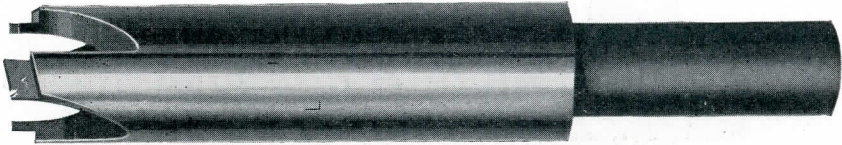
Suitable for all kinds of shallow boring, and will not split light stock. Name complete dimensions. We make this bit up to 12-inch diameter.

Size, Inches ..	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Price, each ...	\$1.10	\$1.10	\$1.10	\$1.35	\$1.60	\$1.95	\$2.30	\$2.65	\$3.00

Size, Inches	2 1/4	2 1/2	2 3/4	3	3 1/2	4	4 1/2	5
Price each	\$3.35	\$3.70	\$4.05	\$4.40	\$5.40	\$6.40	\$7.70	\$9.00

Give style number when ordering.

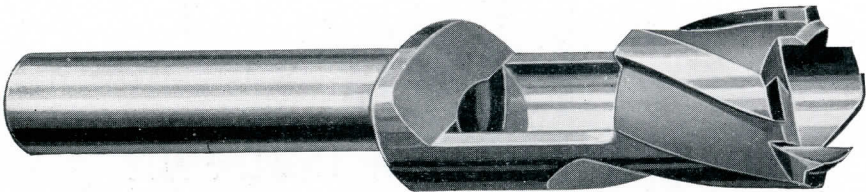
Style 9 Plug Cutter



Used to cut plugs to put over screw heads, etc. Lumber should be cut full of plugs then ripped off on the band saw. Special sizes or styles to order.

Sizes	List Price, Each
3⁄8 inch	\$2.50
7⁄16 "	2.80
1⁄2 "	3.00
9⁄16 "	3.50
5⁄8 "	4.00

Style 9B Spiral Plug Cutter

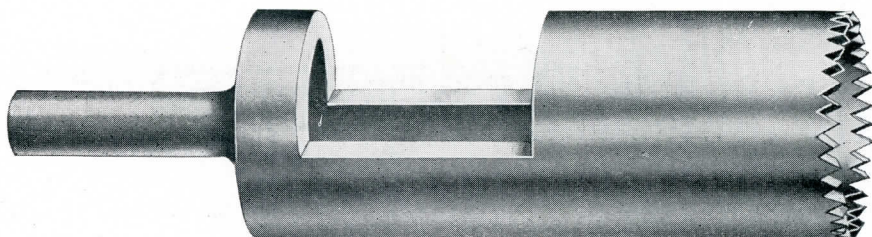


Used to cut plugs or bore large holes. Stock lengths are shanks 1⁄2x2¼ inches long. Barrel 2¼ inches long. Total length 4½ inches.

Special lengths to order.

Size Plug Inches	Price Each	Size Plug Inches	Price Each	Size Plug Inches	Price Each
3⁄8	\$5.00	3⁄4	\$6.00	1¼	\$ 9.00
7⁄16	5.00	11⁄16	6.50	13⁄16	10.00
1⁄2	5.00	7⁄8	7.00	1½	12.00
9⁄16	5.50	15⁄16	7.50	15⁄8	14.00
5⁄8	5.50	1	8.00	17⁄8	16.00
11⁄16	6.00	1¼	8.50	2	18.00

Style 33 Barrel Saw



These saws are usually used to bore the corners from chairs, tables, etc., but may also be used to bore where a bit with center can not be used to advantage.

Standard sizes have shanks $\frac{1}{2}$ inch diameter, by 2 inches long. Barrel 6 inches, total 8 inches long. Made either with or without opening.

Diameter	Price Each	Diameter	Price Each	Diameter	Price Each
1	\$ 8.50	1 $\frac{3}{8}$	\$11.50	1 $\frac{3}{4}$	\$16.00
1 $\frac{1}{8}$	9.50	1 $\frac{1}{2}$	13.00	1 $\frac{7}{8}$	17.50
1 $\frac{1}{4}$	10.50	1 $\frac{5}{8}$	14.50	2	19.00

Shaper Moulding and Planer Knives

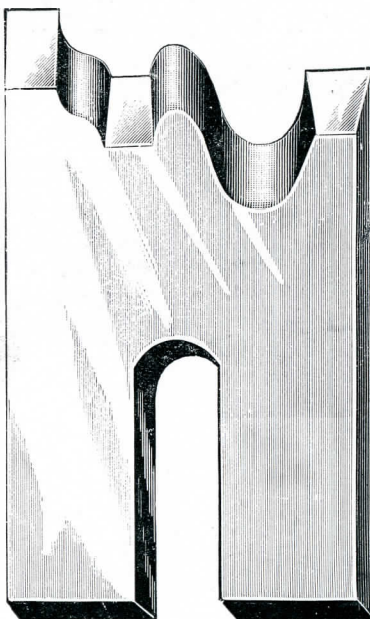
Furnished promptly any shape, style and size. Send pattern, state thickness and specify kind of steel wanted.

Prices always the lowest.

Reinforced Planer Bolts and Nuts

Diameter	Price Each	Diameter	Price Each
$\frac{1}{2}$	\$0.40	$\frac{9}{16}$	\$0.45
$\frac{5}{8}$	.50	$\frac{11}{16}$	.60

Specials to order. Write for estimates.



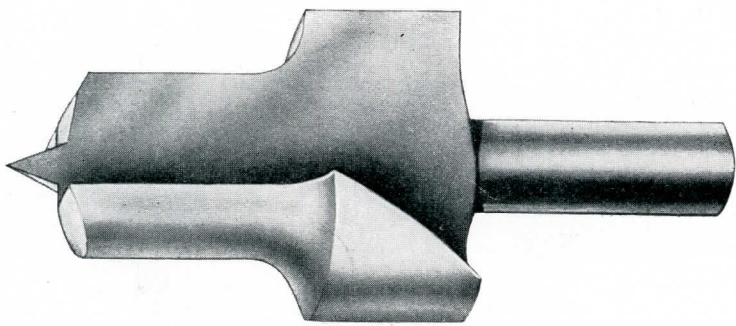
Style 44 Router Bit



Guaranteed to stand up to the most severe strain. Shanks $\frac{1}{2}$ inch diameter $\times$ $1\frac{1}{2}$ inches long. Cutting part $1\frac{1}{2}$ inches long. Total length 3 inches. Special lengths and sizes furnished promptly to order.

Diameter of Bit	Price per Dozen	Diameter of Bit	Price per Dozen
$\frac{1}{4}$ inch.....	\$10.80	$\frac{3}{8}$ "	\$21.60
$\frac{5}{16}$ "	10.80	$\frac{5}{8}$ "	24.00
$\frac{3}{8}$ "	12.00	$\frac{3}{4}$ "	27.60
$\frac{7}{16}$ "	14.40	$\frac{7}{8}$ "	31.20
$\frac{1}{2}$ "	16.80	1 "	36.00

Style 24 Hand Hole Router Bit

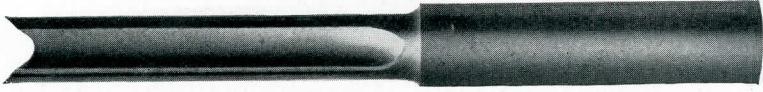


These Router Bits are used to bore and finish the hand holes in beer and pop bottle boxes at one operation.

Large Diameter	Small Diameter	Price Each
$1\frac{3}{4}$	$\frac{7}{8}$, 1, or $1\frac{1}{8}$	\$7.50
Other Sizes on Application.		

Style 6 Vibrating Mortise Bits

Used for Chair Mortising



Made from the best of tool steel. Our special process of tempering insures you a tool which will not break easily even under the most severe strain. Standard sizes have shanks $\frac{1}{2}$ inch diameter x 2 inches long. Length of cut $2\frac{1}{2}$ inches. Larger or longer sizes promptly to order.

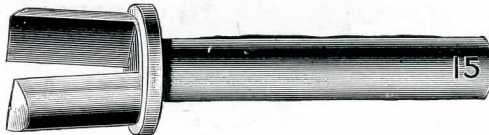
Diameter, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ or $\frac{1}{2}$ inches. List \$18.00 per dozen.

Style 46 Straight Shank Vibrating Mortise Bits



Diameter	Length	List Price Per Dozen
$\frac{1}{4}$ inch.....	4 inches	\$ 6.00
$\frac{5}{16}$ "	4 "	7.20
$\frac{3}{8}$ "	$4\frac{1}{2}$ "	8.40
$\frac{7}{16}$ "	$4\frac{1}{2}$ "	9.60
$\frac{1}{2}$ "	$4\frac{1}{2}$ "	13.20

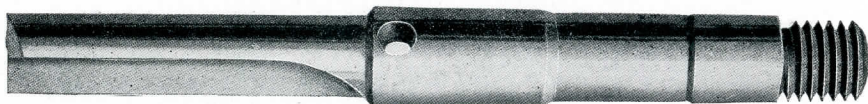
Style 15 Stair Router Bits



The Shanks are made $2\frac{1}{2}$ inches long by $\frac{1}{2}$ -inch diameter.

Diameter, $\frac{3}{4}$ -inch.....	Price, each \$2.50
" $\frac{7}{8}$ "	" " 3.00
" 1 "	" " 3.50
" $1\frac{1}{8}$ "	" " 4.00
" $1\frac{1}{4}$ "	" " 5.00

Style 54 Router Bit for Pulley Sash

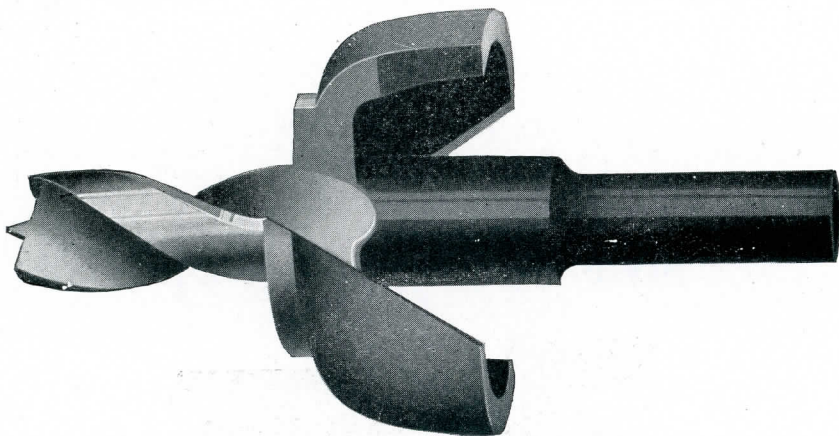


Used in window frame machines for mortising sash pulley holes. Made with either straight, taper or screw shanks. When ordering send sample bit.

Size	$\frac{5}{8}$	$\frac{3}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$	$1\frac{1}{2}$	1
Price, each	\$4.50	\$4.50	\$5.00	\$5.00	\$5.50	\$5.50

Size	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$1\frac{1}{2}$
Price, each	\$5.50	\$6.00	\$6.00	\$6.50	\$7.00	\$8.00

Style 100 Piano Caster Countersink

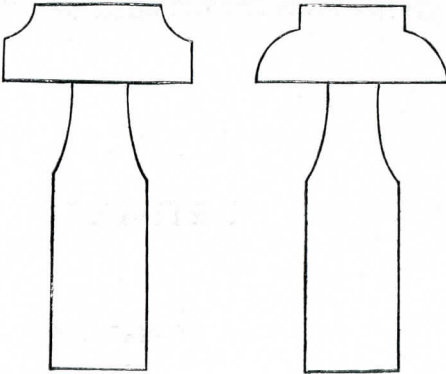


This tool is made in various shapes and sizes to countersink casters in pianos, tables and furniture. Casters set in this way add strength and beauty to the goods.

These tools are generally made to order to suit different conditions. Therefore prices are quoted upon receipt of complete specifications.

The following are Reprints from our Catalog of 1877

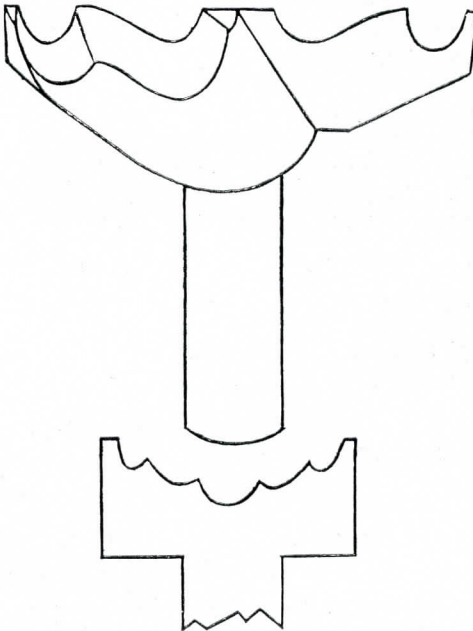
Panel Bits or Rounding Bits



Dia. Inches	Price Each	Dia. Inches	Price Each
$\frac{3}{4}$	\$ 5.00	$2\frac{1}{4}$	\$13.00
1	6.50	$2\frac{1}{2}$	14.50
$1\frac{1}{2}$	8.50	$2\frac{3}{4}$	16.00
2	11.50	3	18.00

When ordering send shape desired and tell us diameter and length of shank.

Rosette Cutters



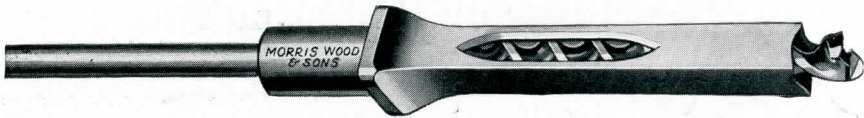
These cutters are made to order on receipt of complete specifications. They are made with two, four or any number of teeth best suited to the rosette to be cut.

Our tools produce the best work at the lowest cost.

Our experience covers any requirement.



Style 500 Hollow Mortising Chisel



Always give name of machine in which Chisels are to be used. Send sample with first order.

SHORT CHISELS FOR SMALL MORTISERS

BLADE 4 INCHES LONG

HOLLOW CHISELS		
4-inch Blade		
Size	Price Each	
1/4 x 1/4 in.	\$4.40	
5/16 x 5/16 in.	4.40	
3/8 x 3/8 in.	4.40	
7/16 x 7/16 in.	4.80	
1/2 x 1/2 in.	4.80	
5/8 x 5/8 in.	5.25	
3/4 x 3/4 in.	5.25	
7/8 x 7/8 in.	5.65	
1 in. x 1 in.	5.65	
1 1/8 x 1 1/8 in.	5.65	
1 1/4 x 1 1/4 in.	6.05	
1 1/2 x 1 1/2 in.	6.05	
1 3/4 x 1 3/4 in.	6.05	
2 in. x 2 in.	6.05	
2 1/4 x 2 1/4 in.	6.50	
2 1/2 x 2 1/2 in.	6.50	
2 3/4 x 2 3/4 in.	6.90	
3 in. x 3 in.	6.90	
3 1/4 x 3 1/4 in.	7.35	
3 1/2 x 3 1/2 in.	7.35	

HOLLOW CHISEL BITS		
6-inch Twist		
Size	Price Each	
1/4 in.	\$1.20	
5/16 in.	1.20	
3/8 in.	1.20	
7/16 in.	1.20	
1/2 in.	1.20	
9/16 in.	1.35	
5/8 in.	1.50	
11/16 in.	1.70	
3/4 in.	1.80	
13/16 in.	1.95	

Special chisels to order on receipt of sample.

Bit Bushings	
Diameter	Price Each
1/2 in., plain style	\$1.00
3/4 in., threaded	1.50

Chisel Bushings	
Diameter	Price Each
1 3/8 in.	\$2.25
1 1/4 in.	2.50
2 1/4 in.	2.75
2 3/4 in.	3.00
3 1/4 in.	3.25

Send sketch with dimensions marked when ordering.

Medium and Long Hollow Mortising Chisels and Bits

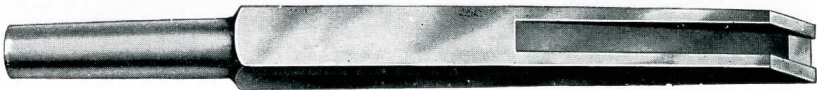
HOLLOW CHISELS

Size	6½-inch Blade	8-inch Blade
⅜ in.	\$ 7.20	
⅞ in.	7.60	
½ in.	8.00	
⅞ in.	8.40	
⅝ in.	8.80	
1 in.	9.20	\$10.35
1¼ in.	9.60	10.35
1½ in.	10.05	10.85
1¾ in.	10.45	11.30
2 in.	10.90	12.25
2¼ in.	11.30	12.25
2½ in.	12.40	13.50
2¾ in.	13.40	14.60
3 in.	14.60	16.00
3¼ in.	15.80	17.40
3½ in.	17.30	19.00
3¾ in.	18.70	20.50
4 in.	20.40	22.30
4¼ in.	22.00	24.00
4½ in.	24.10	26.30
4¾ in.	26.20	28.50
5 in.	31.10	33.75

HOLLOW CHISEL BITS

Size	9-inch Twist	10-inch Twist	11-inch Twist
⅜ in.	\$1.50	\$1.75	
⅞ in.	1.50	1.75	
½ in.	1.50	1.75	
⅞ in.	1.60	1.90	
⅝ in.	1.75	2.00	\$ 2.25
1 in.	1.85	2.20	2.25
1¼ in.	2.00	2.40	2.50
1½ in.	2.20	2.60	2.70
1¾ in.	2.40	2.80	2.90
2 in.	2.60	3.00	3.20
2¼ in.	2.75	3.25	3.50
2½ in.	3.00	3.50	3.75
2¾ in.	3.30	3.70	4.00
3 in.	3.65	3.90	4.25
3¼ in.	3.90	4.25	4.65
3½ in.		4.50	5.00
3¾ in.		4.80	5.50
4 in.		5.25	6.00
4¼ in.		5.70	6.75
4½ in.		6.20	7.50
4¾ in.		7.25	9.00
5 in.		8.50	10.00

Style 36 Standard Solid Mortise Chisel



¼ to ⅝ diameter Standard, send sample shank when ordering. Price each....\$2.00

Style 37 Mortise Cleaning Bit

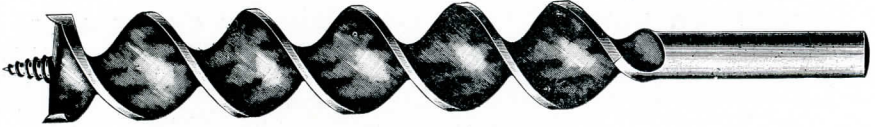


For cleaning chips out of mortise after chisel has been used. Standard Shanks ½x1½.

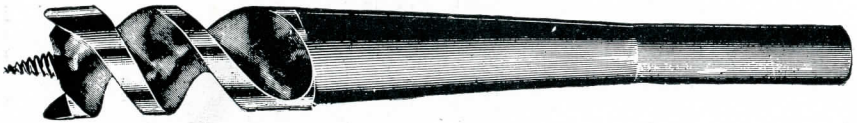
¼ to ⅝ diameter Standard stock sizes.....\$1.50 each

Style 26 Double Spur Machine Auger Bit

For Smooth Boring in any kind of Stock.



Style 21 Relishing Bit



Standard sizes have $1\frac{3}{4} \times \frac{3}{8}$ in. shanks. 5 inches over all. Jennings head. Special sizes and left hand ones made promptly to order, on which name complete dimensions.

Style 28 Felloe Bit

Used extensively by Manufacturers of Vehicle Wheels.



Will not split the stock. Standard sizes have 2 inch twist and 3 inch shank.

Style 35 Colburn Blind Stile Bit



Standard sizes have shanks $\frac{3}{8}$ in. diam. $\times 1\frac{3}{4}$ in. long and are $3\frac{1}{2}$ in. total length.

For list prices on any of the above see price list on page 25. Special lengths, diameters or styles of Auger Bits on application.

List Prices of Bits shown on opposite page

Size 16th	6-in. twist	8-in. twist	10-in. twist	12-in. twist	14-in. twist
4	10.80	12.96	15.12		
5	10.80	12.96	15.12		
6	10.80	12.96	15.12	17.28	
7	10.80	12.96	15.12	17.28	
8	10.80	12.96	15.12	17.28	19.44
9	12.00	14.40	16.80	19.20	21.60
10	13.20	15.84	18.48	21.12	23.76
11	14.40	17.28	20.16	23.04	25.92
12	15.60	18.72	21.84	24.96	28.08
13	16.80	20.16	23.52	26.88	30.24
14	18.00	21.60	25.20	28.80	32.40
15	19.20	23.04	26.88	30.72	34.56
16	20.40	24.48	28.56	32.64	36.72
17	21.60	25.92	30.24	34.56	38.88
18	22.80	27.36	31.92	36.48	41.04
19	24.00	28.80	33.60	38.40	43.20
20	25.20	30.24	35.28	40.32	45.36
21	26.40	31.68	36.96	42.24	47.52
22	27.60	33.12	38.64	44.16	49.68
23	28.80	34.56	40.32	46.08	51.84
24	30.00	36.00	42.00	48.00	54.00
25	31.50	37.80	44.10	50.40	56.70
26	33.00	39.60	46.20	52.80	59.40
27	34.50	41.40	48.30	55.20	62.10
28	36.00	43.20	50.40	57.60	64.80
29	37.50	45.00	52.50	60.00	67.50
30	39.00	46.80	54.60	62.40	70.20
31	40.50	48.60	56.70	64.80	72.90
32	42.00	50.40	58.80	67.20	75.60



Special sizes
lengths or styles of
bits furnished
promptly at special
prices.

Customers are re-
quested to hold to
standard as nearly
as possible.



Style 45 Moulding Router Bits

For Moulding and Picture Frame Factories



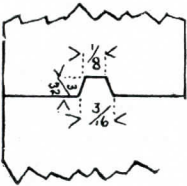
We also make these bits with taper points if desired.

Shanks $\frac{1}{2}$ inch diameter or less.

Price $\frac{1}{2}$ inch diameter or less.....\$18.00 per doz.

Always give style number when ordering.

Twentieth Century Solid Steel Glue Joint Cutters



These are the simplest, easiest sharpened, fastest cutting, and longest lasting glue joint cutters or cutter heads on the market. For quality of work produced, as well as economy, in time saved adjusting knives in sectional heads they have no equal.

Because of this our cutters have been copied. Insist on the genuine for best results. They will be furnished as regular equipment on your jointer if you insist upon them.

In stock fitting Jenkins, Myers, Yates, Diehl, Fay Egan and all other jointers. Standard stock joint is shown at the left. Other joints furnished promptly.

All listed sizes in stock, in single tongue and groove. Also in stock in straight face.

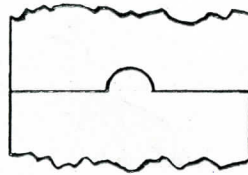
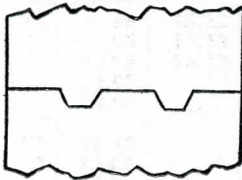
Tell make of jointer, thickness you desire cutters and size of holes. Send sample joint.

Prices of Cutters 5 1/4 inches diameter

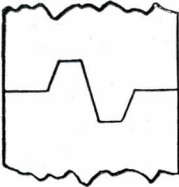
Thickness	Per Pair	Thickness	Per Pair
1 1/4	\$42.00	3	\$ 80.00
1 1/2	46.00	3 1/4	88.00
1 5/8	48.00	3 1/2	96.00
1 3/4	50.00	3 3/4	104.00
2	55.00	4	112.00
2 1/4	60.00	4 1/4	120.00
2 1/2	66.00	4 1/2	128.00
2 3/4	72.00		

Straight face cutters \$2.00 per pair less.

The following are special joints, furnished either single, double or triple. Also furnished larger or smaller or on a bevel. Any style of joint or shape of mould furnished promptly.



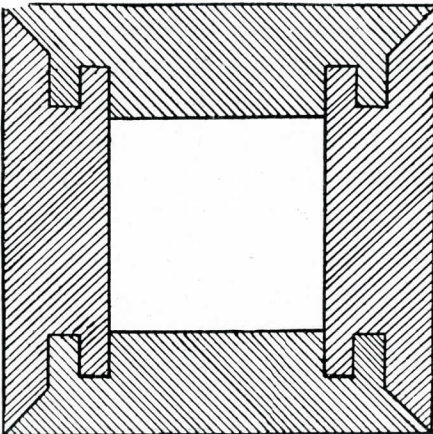
Twentieth Century Two in One Glue Joint Cutter



Only one cutter required. Standard joint is smaller than illustration.

$4\frac{1}{2}$ diameter x $1\frac{1}{16}$	Each \$25.00
$5\frac{1}{4}$ diameter x $1\frac{1}{16}$	Each 28.50

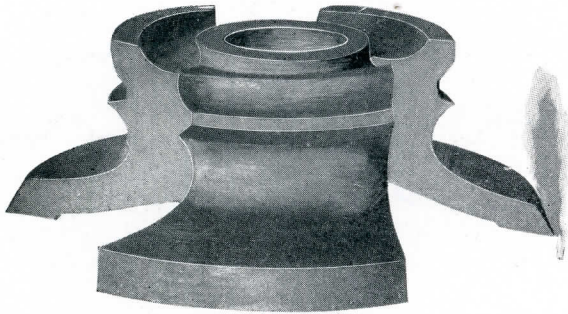
Twentieth Century Mitre Lock Cutters



Made any diameter and thickness. Our Mitre Lock Cutters are giving satisfaction to customers everywhere, and we have made them for years. Often copied but not equaled. Your protection is to get the genuine. Write for special prices.



Twentieth Century Solid Shaper Cutters



Made undercut and with deep throat exactly the same as glue joint cutters shown on page 26.

Produce smooth work either with or across grain. Cut very easy. Do not change shape. Stay sharp a surprisingly long time, and save their cost quickly in the time saved setting up and adjusting flat knives.

When used on Stickers a hub with set screw is fastened to side of cutter. When ordering send sample of any work you wish to cut and get real cutter satisfaction.

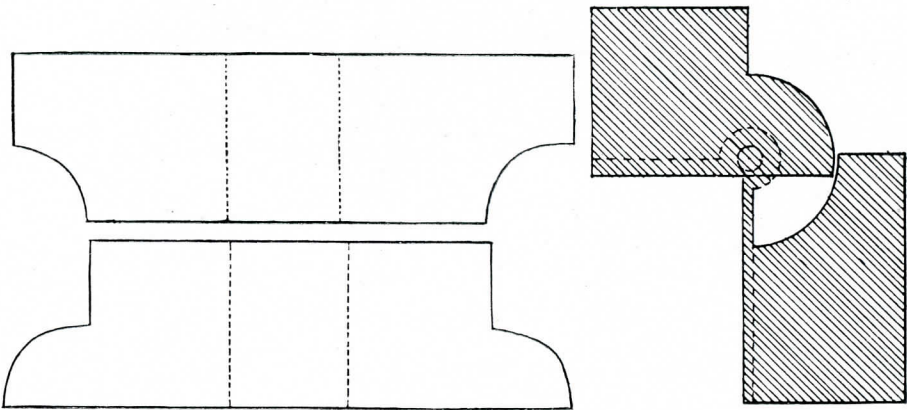
Our Shaper Cutters are saving money for hundreds of customers in all parts of the world for making Paint Brush Handles, octagon, round or square Lead Pencils, Shaping Toilet Seats, Door Panels, Radio Cabinets, Shaping Desk, Table and Dresser Tops and other work too numerous to mention. In some cases we have increased production five or six times over other makes of solid steel cutters, in the making of Pencils, Paint Brush Handles, etc.

List prices are shown on page 31.



The following reprints from our catalog dated January, 1877, show our own original ideas fifty years ago, when flat knives were universally used. Our improved methods of manufacture produce cutters of unequalled quality for easy cutting, long lasting and finely finished goods.

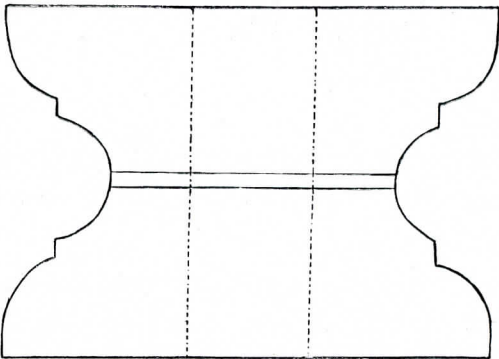
Table Leaf Joint Cutters



PRICE

Diameter	Thickness	
4½ inches	1 inch.....	Per Pair \$42.25
5¼ inches	1 inch.....	Per Pair 50.00

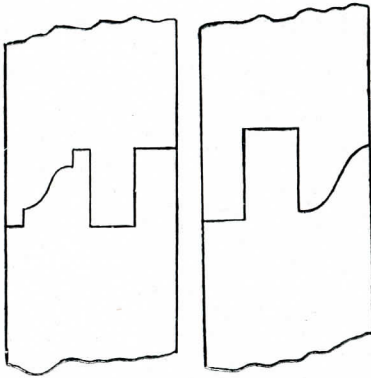
Any size hole desired, other sizes on application.



Shaper Cutter
in two parts, with
collar between

No pattern needed to run on.

List prices for any desired shape of mould shown on page 31.



Cope Cutters, Cabinet Shaper Cutters

Any desired size.

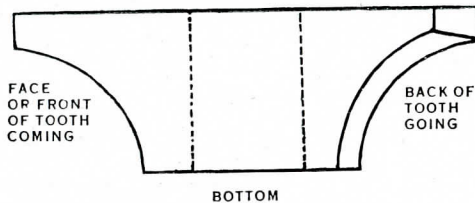
See page 31 for prices.

Instructions for Ordering Shaper Cutters:

Send sample of mould,
Tell us diameter of hole,
Tell us diameter of cutter,
Tell us thickness of cutter,

unless we are to use our own judgment.

If to be run with guide collar tell us diameter of collar. Tell us direction in which cutters are to run as follows: Make an outline sketch of your cutter, similar to one below, telling us which side is front and which is back of tooth.



Above sketch shows a cutter used on the right hand spindle of double spindle shaper, revolving to the left when looking down on the top of cutter.

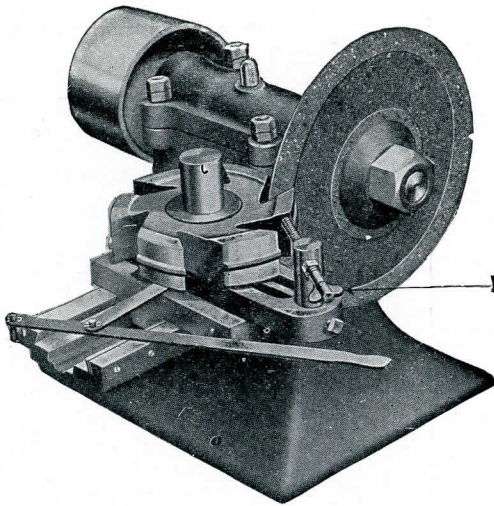
This method is preferable and less liable to mistakes, than ordering right hand, left hand or clockwise, or other methods sometimes used to order cutters.

ADD 10% TO THIS PRICE LIST OF SOLID STEEL CUTTERS

FOR EDGE MOULDING, SHAPING, JOINTING, GROOVING AND MATCHING.

Thick- ness	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/8	2 1/4	2 3/8	2 1/2	2 5/8	2 3/4	3
Diam.																				
2	\$5.00	\$5.00	\$5.50	\$6.10	\$6.60	\$7.20	\$7.70	\$8.30	\$8.80	\$9.40	\$9.90	\$10.50	\$11.00	\$11.60	\$12.10	\$12.70	\$13.20	\$13.80	\$14.30	\$15.40
2 1/4	5.50	6.10	6.60	7.20	7.70	8.30	8.80	9.40	9.90	10.50	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.50
2 1/2	6.60	7.20	7.70	8.30	8.80	9.40	9.90	10.50	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.50	17.10	17.60
2 3/4	7.70	8.30	8.80	9.40	9.90	10.50	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.70
3	8.80	9.40	9.90	10.50	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.20	18.70	19.80
3 1/4	9.90	10.50	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.20	18.70	19.30	19.80	20.40
3 1/2	11.00	11.60	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.20	18.70	19.30	19.80	20.40	20.90	21.50
3 3/4	12.10	12.70	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.20	18.70	19.30	19.80	20.40	20.90	21.50	22.00	23.10
4	13.20	13.80	14.30	14.90	15.40	16.00	16.50	17.10	17.60	18.20	18.70	19.30	19.80	20.40	20.90	21.50	22.00	23.10	24.20	26.00
4 1/4	15.60	16.20	16.80	17.40	18.00	18.60	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.60
4 1/2	16.80	17.40	18.00	18.60	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	28.80	30.00
4 3/4	18.00	18.60	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.80	31.00	33.00
5	19.20	19.80	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.80	30.00	31.00	33.00	35.00
5 1/4	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.80	29.50	30.00	31.00	33.00	36.00	40.00
5 1/2	21.60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.80	29.50	30.00	31.00	33.00	36.00	38.00	40.00	44.00
5 3/4	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.80	29.50	30.00	31.00	32.00	33.00	35.00	38.00	40.00	46.00	48.00
6	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.00	29.00	30.00	31.00	32.40	35.00	38.00	41.00	44.00	46.00	48.00	50.00	52.00

Twentieth Century Cutter Grinder



As shown in the illustration this machine grinds every tooth alike. Every one must be the same thickness from cutting edge to back of tooth, as the Thumb Gauge No. 1 (Threaded its entire length) is slowly turned, forcing the face of tooth against the emery wheel until a perfect cutting edge is obtained. Lock-nut is then tightened to keep gauge from turning. Cutter is pulled away from emery wheel, and by lifting cutter it may be turned to the next tooth and so on until the six teeth have been ground according to the first setting of the gauge.

An adjustable stop prevents damage to emery wheel and cutter. The sharpening of different diameters of cutters is accomplished by moving top rest to right or left, by loosening one bolt on the under side of lower rest.

Equipment—Grinder complete as shown in cut, with Cup Emery Wheel, and Countershaft. New low price on application.

Weight—Complete for shipment, 100 pounds.

Speed of Emery Wheel 2400 rev. per minute.

